



Fig. 1

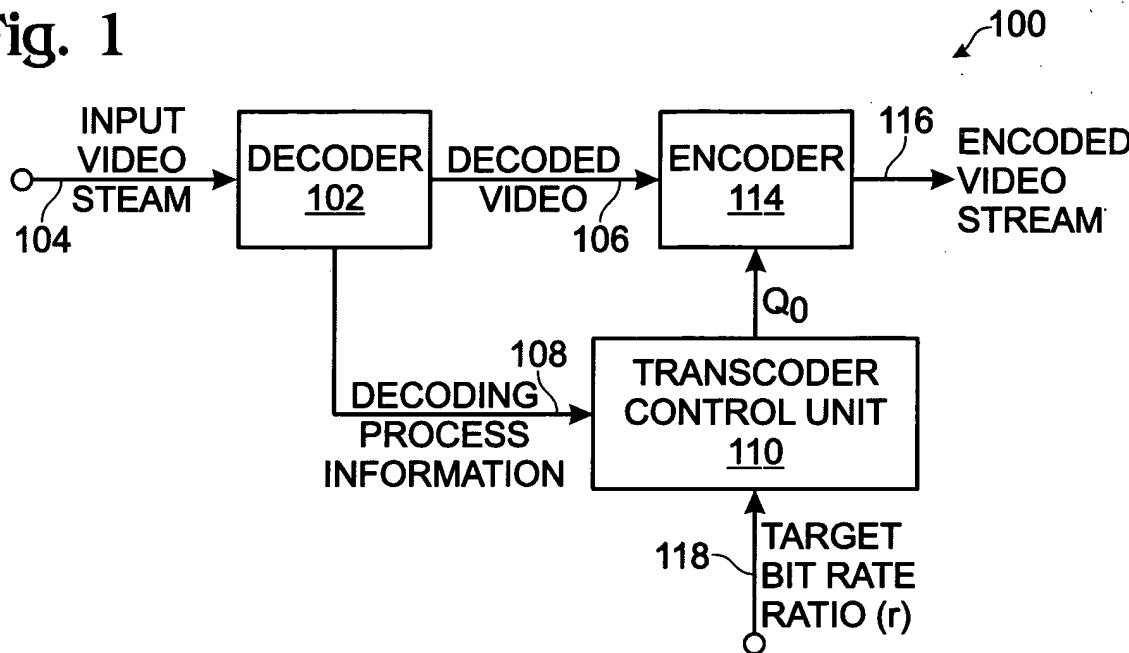


Fig. 2

- STEP 1. GET THE PICTURE TYPE AND $N_{i,k}$, $Q_{i,k}$, FROM PARSED MPEG-2 STREAM
- STEP 2. IF THIS IS THE FIRST TIME FOR THIS TYPE, SET $Q_{o,k}$ EQUAL TO $Q_{i,k}/r$ AND GO TO STEP SEVEN
- STEP 3. UPDATE THE ACCUMULATED TARGET BITS, TARGET COMPLEXITY, ACTUAL BITS, AND ACTUAL COMPLEXITY FOR THIS PICTURE TYPE
- STEP 4. COMPUTE THE COMPLEXITY RATIO $\alpha_k = \frac{\sum_{j=0}^{k-1} (Q_{o,j} \cdot N_{o,j})}{\sum_{j=0}^{k-1} (Q_{i,j} \cdot N_{i,j})}$
- STEP 5. COMPUTE THE BIT RATE ADJUSTMENT FACTOR $B_k = \frac{\sum_{j=0}^{k-1} N_{o,j}}{r \cdot \sum_{j=0}^{k-1} N_{i,j}} = \frac{r_k}{r}$
- STEP 6. COMPUTE $Q_{o,k} = \frac{\alpha_k \cdot Q_{i,k}}{r} \cdot B_k$
- STEP 7. ENCODE THIS FRAME USING $Q_{o,k}$ AS THE QUANTIZATION PARAMETER
- STEP 8. REPEAT STEP ONE TO STEP SEVEN FOR ALL THE REMAINING FRAMES

Fig. 3

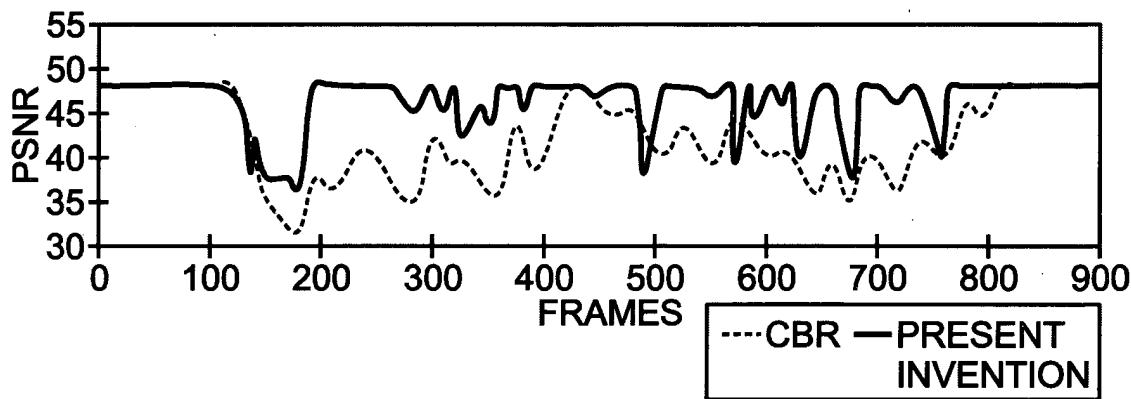


Fig. 4

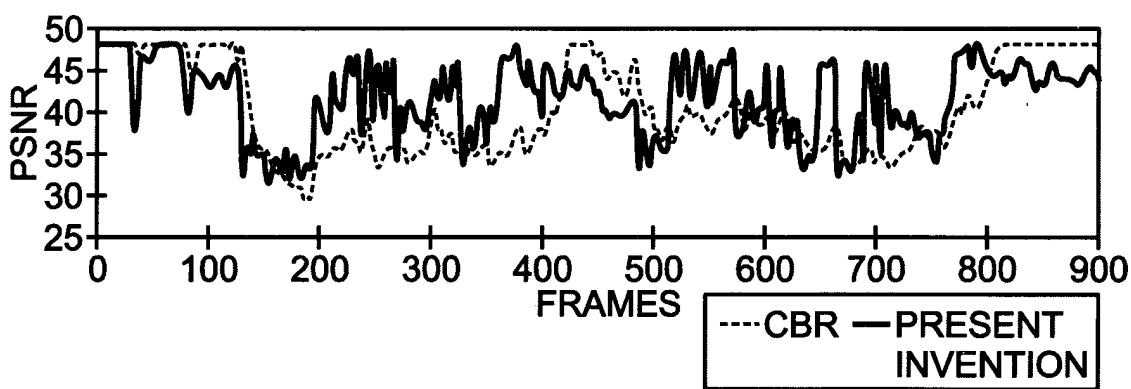


Fig. 5

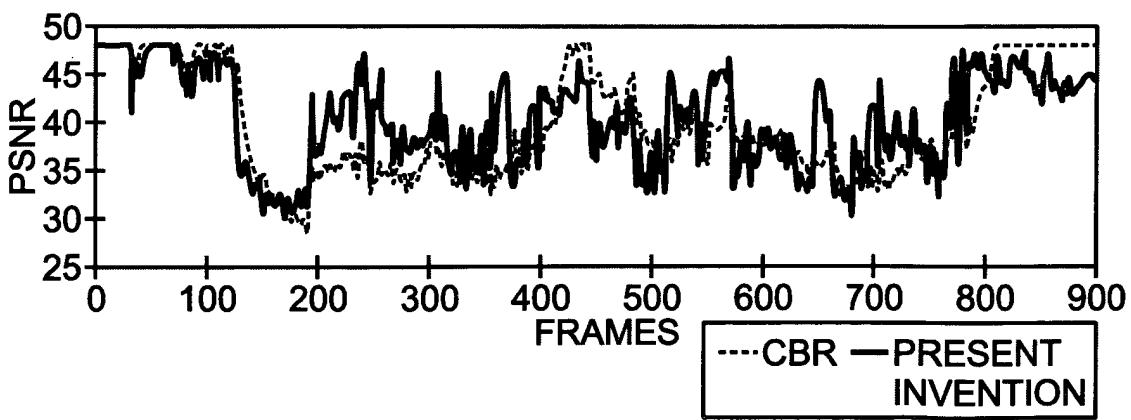


Fig. 6

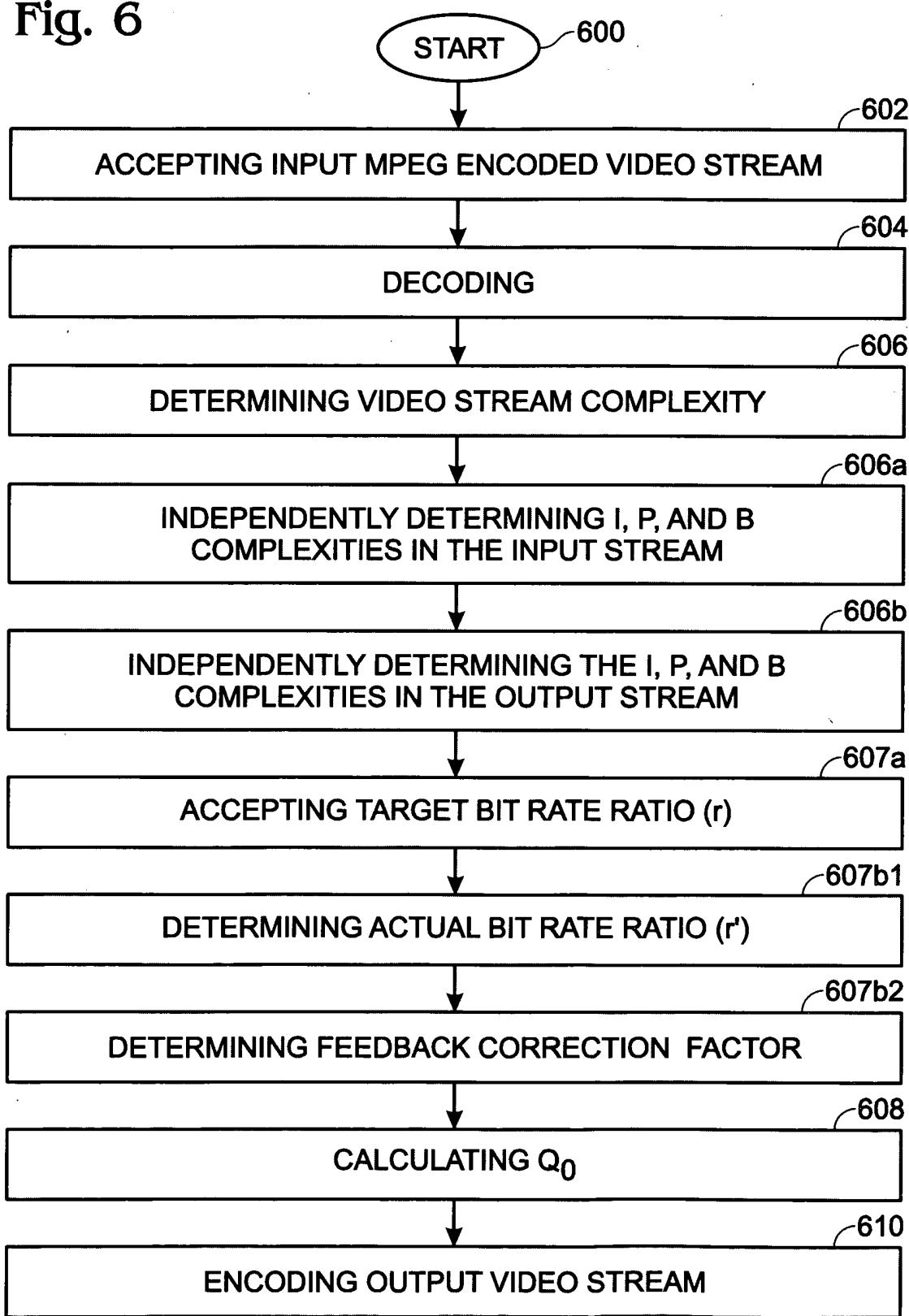


Fig. 7

